

Green Tips

Doing your part

Vermicomposting

Composting is a natural process where kitchen and yard wastes decompose into a dark, nutrient-rich, sweet-smelling soil conditioner. Perhaps you've considered composting but live in a highrise or don't relish the thought of tramping through your garden in the middle of a winter blizzard. If this sounds like you, vermicomposting is the answer.

What is vermicomposting?

Vermicomposting is simply composting with worms. The best kind of earth worm to use is the red worm (also known as the red wiggler). These worms are incredible garbage eaters! They eat and expel their own weight every day, so even a small bin of red worms will produce many kilograms of rich, sweet-smelling compost. Finished compost can be harvested in as little as two or three months. Red worms are extremely prolific. It takes about three weeks for an egg to develop and as many as twenty youngsters can be hatched from one egg. In three months the worms are sexually mature and will start breeding. Within a year you will be able to give worms away to get a friend started!

Where can I get a worm bin and worms?

To start a vermicomposter for one or two people, you will need a plastic bin. Make sure the bin has a lid. For four to six people there is a design sheet, available from the Recycling Council of Ontario, that shows you how to

build your own. Worms are available from stores selling fishing bait or from vermicomposting suppliers.

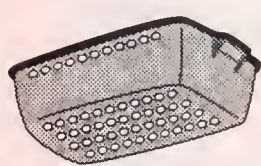
How do I set up the bin?

Make sure eight to ten holes (approximately 1 cm or 1/4") are drilled in the bottom of the bin for adequate drainage. Place the bin on blocks with a tray underneath. Now you need to think about bedding for the worms. Red worms can survive and breed in many kinds of bedding materials. Remember that the red worm is a manure worm and will eat its own bedding. Materials such as straw, grass clippings, dried leaves, chopped plants, dampened peat moss, aged animal manures, ground cardboard or shredded paper can all be used. Bedding can be mixed (e.g. half straw, half dried leaves). The important thing is to keep the bedding as moist as a well-wrung sponge. Now comes the fun part...putting in the worms!

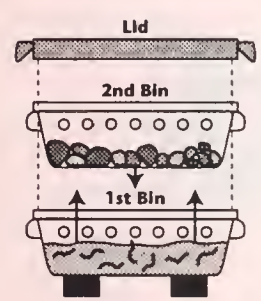
What do I feed worms?

Worms will eat just about any type of kitchen waste. This includes vegetable and fruit wastes, coffee grounds, tea bags and finely-crushed egg shells. Avoid putting starches, meats and fats into your composter. Always dig the waste into the bedding.

Vermicomposting can transform your kitchen waste into rich compost in just a few months.

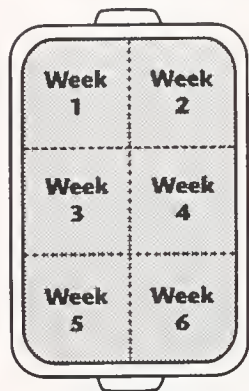


Worm Bin



The worms will crawl up through the holes into the new bedding

# of People	Quantity of worms	Bin size (h x l x w)
1 or 2	0.5 kg (1 lb.)	45 x 60 x 30 cm (1.5' x 2' x 1')
2 or 3	1.0 kg (2 lbs.)	60 x 60 x 30 cm (2' x 2' x 1')
4 to 6	1.5 to 2.0 kg (3 to 4 lbs.)	60 x 105 x 30 cm (2' x 3.5' x 1')



Place the food
in a different
section of the
bin each week

Can worms live outside during colder months?

Worms prefer temperatures between 4 and 27 degrees Celsius (40° - 80°F). They can live quite happily out of doors until temperatures drop to 4°C (40°F). After that they should be taken indoors or kept well insulated. Insulated bins are available from some garden and hardware stores, or from some of the companies that supply vermicomposting materials.

How can I harvest the finished compost?

After about three months you will notice that the volume of materials has dropped substantially and the original bedding is no longer recognizable. At this point the finished compost and worms can be moved over to one side of the bin and new bedding added to the vacant side. Put new food wastes into the fresh bedding only so the worms will move from the finished compost in search of new food. After about a week, remove the lid under a bright light source. The worms are sensitive to light and will burrow away from it. Scoop out the finished compost a few layers at a time and place in a plastic bag until you are ready to use it.

How can I use the finished compost?

Vermicompost will provide nutrients to your plants and will help the soil hold moisture. It can be used in a number of ways:

- Sprinkle into a seed row when planting.
- When transplanting, add a handful to the hole you have dug for the plant.
- Use as a top dressing, sprinkling the compost around the base of your plants.
- Mix with potting soil (half and half) for house plants.

Adapted from Vermicomposting, a fact sheet produced by the Recycling Council of Ontario.

For more information contact:

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